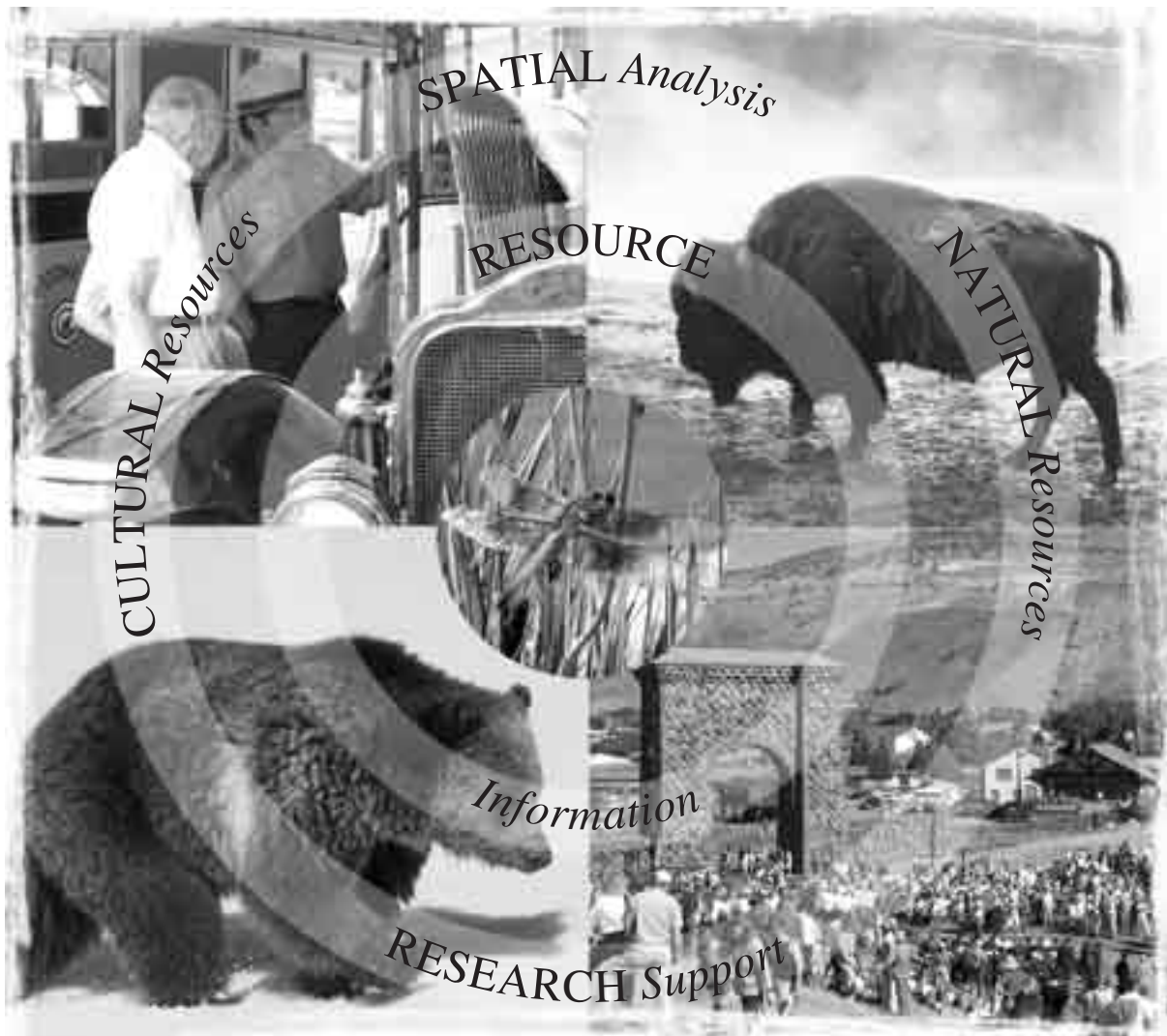


YELLOWSTONE CENTER FOR RESOURCES



ANNUAL REPORT
2003
FISCAL YEAR

YELLOWSTONE CENTER FOR RESOURCES 2003 ANNUAL REPORT

FISCAL YEAR (OCTOBER 1, 2002, TO SEPTEMBER 30, 2003)



Yellowstone Center for Resources
National Park Service
Yellowstone National Park, Wyoming

YCR-AR-2003
2004



Suggested citation: Yellowstone Center for Resources. 2004. Yellowstone Center for Resources Annual Report, Fiscal Year 2003. National Park Service, Mammoth Hot Springs, Wyoming, YCR-AR-2003.

Photographs not otherwise marked are courtesy of the National Park Service.

Front cover: clockwise from top left, museum staff interprets historic vehicles at the Roosevelt Arch centennial celebration; Yellowstone bison by Alice Wondrak Biel; crowd at the arch celebration; grizzly bear #264; dragonfly photo taken as part of macroinvertebrate study.

Title page: Grizzly bear #264 and cubs.

Back cover: Wickiup in Yellowstone National Park, by Alice Wondrak Biel.

Contents

Introduction	iv
Part I. Resource Highlights	1
Part II. Cultural Resource Programs	7
Archeology.....	7
Ethnography	10
History.....	15
Museum, Library, and Archives.....	22
Part III. Natural Resource Programs	29
Air, Land, and Water	29
Aquatic Resources and Fisheries.....	32
Geology and Geothermal Resources	40
Vegetation	46
Wildlife	51
Bears	51
Birds.....	56
Bison	59
Lynx	66
Ungulates.....	66
Wolves	70
Part IV. Professional Support Programs	75
Spatial Analysis Center.....	75
Resource Information and Publications.....	78
Research Permitting and Support	79
NPS Servicewide Benefits-Sharing EIS	80
Funding, Personnel, and Administrative Support.....	81
Appendix I. Personnel Roster for 2003	85
Appendix II. Publications, Reports, and Papers	89
Appendix III. Partnerships	93
Standing Partnerships	93
Project-Based Partnerships	101

Introduction

Highlights of this year's YCR Annual Report include an expanded Partnerships section (appendix III), featuring not only a description of each of 34 standing partnerships in which YCR personnel are involved, but also a table listing 79 project-based partnerships. These partnerships and agreements with other federal and state agencies, academia, and public organizations are critical to our continued successes in stewardship. The Research Permit Office authorized 221 research permits to investigators from 33 U.S. states and 7 foreign countries, again showing the park's value as a scientific laboratory as well as a pleasuring ground.

Interdivisional partnerships were also a highlight of FY03. Spatial Analysis Center staff initiated a collaborative project with the park's Division of Maintenance to locate and document all of Yellowstone's water and wastewater components; because the locations of sewers, valves, and other elements were previously recorded only in employee memory or on paper maps several decades old, this project will greatly improve the Maintenance Division's ability to manage its facilities. The park celebrated the 100th anniversary of the Roosevelt Arch on August 25, 2003, with a gala event. All of the park's divisions helped in some way to make the celebration a success; YCR's contribution included a special issue of *Yellowstone Science* devoted to the history of the arch, written and produced by staff from the Branch of Cultural Resources and the Resource Information and Publications Team.

Encouraging news for natural resource managers in FY03 included an increase in juvenile cutthroat trout found in recent years, viewed as an encouraging signal that the lake trout removal program's effects are significant, and making a major contribution to the preservation of Yellowstone cutthroat trout. Grizzly bear recovery parameters were met again in 2003, and have now been achieved every year since 1998. Wolves also met the minimum population size as outlined in the recovery plan for the fourth successive year, but de-listing cannot proceed until approved state management plans are in place.

Fort Yellowstone was listed on the National Register of Historic Places in FY03, and the long-awaited *Ecology of Ungulates and their Winter Range in Northern Yellowstone National Park, Research and Synthesis, 1962-70*, by William J. Barmore, Jr., was published. A volunteer program was initiated to aid in the conservation of some of the park's historic structures, and park managers worked with members of several park-affiliated Tribes on a project that will result in a variety of new media interpreting past and present Native American experience in Yellowstone.

We hope this report continues to assist us in attaining the goals of the YCR, which are to provide outreach, contribute to literature, promote interpretation, and most of all, strive to learn more about the resources we are mandated to manage and protect. For more information about specific topics of interest, readers may contact us at (307) 344-2203, or visit the park's web site at www.nps.gov/yell.



John D. Varley
Director, Yellowstone Center for Resources



Wolf Project Leader Doug Smith with a Swan Lake pack wolf during the 2003 capture effort.

Part I. Resource Highlights

WOLF RESEARCH

Beginning in summer 2003, wolf project staff began efforts to document summer predation patterns by wolves. Documenting the predatory habits of wolves in summer is problematic due to the lack of snow for tracking, increased nighttime activity of wolves, lack of pack cohesiveness, and smaller prey, leading to quick consumption and loss of evidence. Traditionally, the best data concerning wolf summer food habits have come from analysis of scat contents collected at den and rendezvous sites. In the summer of 2003, project staff collected a record 530 wolf scats from the Bechler, Druid Peak, Leopold, Geode, Nez Perce, Cougar Creek, Swan Lake, and Slough Creek wolf packs at their den and rendezvous areas. When analyzed, these samples will provide relative indices of prey selection and consumption patterns during the summer.

An important element of post-restoration wolf research concerns trophic cascade effects (i.e., how the restoration of a top predator to the Yellowstone ecosystem has affected the rest of the system's food chain). One aspect of this research concerns wolves' effects on scavenger guilds. Research on wolf and scavenger interactions has been conducted since 1998, through support from Canon, U.S.A., and the Yellowstone Center for Resources (YCR). This research, largely done in winter, has monitored how wolves influence the abundance and distribution of carrion, both spatially and temporally, as well as how they facilitate food acquisition by other carnivores. Although a great deal has been learned about the magnitude and relative importance of wolf-killed carcasses to the winter scavenger communities, little is known about the impact on summer scavengers, both vertebrate and invertebrate. It is hoped that this focus on summer scavenging will offer a complete picture of the ecological relationship between wolves and scavengers relative to seasonal variation, abundance, and diversity. In summer 2003, project staff increased monitoring efforts on

summer carcasses to document scavenger utilization and behavioral interactions between wolves and scavengers. Preliminary results indicate less use by vertebrate scavengers than is documented during winter, likely due to alternate food source availability. This would suggest an increase in biomass available for consumption by wolves; however, the impact of invertebrate scavengers is not known at this time. On several occasions, wolves have been documented scavenging on other predators' kills, suggesting this to be a beneficial foraging strategy at times.

ARCHEOLOGICAL INVENTORY

Park archeologist Ann Johnson and seven volunteers spent nine days around the Southeast Arm of Yellowstone Lake in fiscal year 2003 (FY03). The purpose of this work was to obtain an archeological inventory for a remote area where sites were expected to be eroding, and where camping and fishing activities leave sites vulnerable to unauthorized collection. Inventory of about four miles of lakeshore and six miles of adjacent backcountry trails resulted in the identification of seven new prehistoric sites, with revisits to three previously-recorded sites. New insights into settlement patterns (prehistoric use of the area) were gained; it was learned that early people did not restrict their use of the area to just the shoreline.

SOME GOOD NEWS FOR YELLOWSTONE CUTTHROAT TROUT

Data collected in 2003 provided some of the first evidence in several years that the Yellowstone cutthroat trout population may be responding positively to efforts to remove non-native lake trout from Yellowstone Lake. Annual status of the Yellowstone cutthroat trout population of Yellowstone Lake has been assessed by counts of upstream-migrating spawners at Clear Creek, Bridge Creek, and Arnica

Creek; by dipnetting adult spawners at LeHardys Rapids; and by a netting program on the lake conducted during September. In 2003, an average of 7.4 cutthroats were collected per net, up from 6.1 fish per net in 2002, which was the lowest point recorded since 1969. There has been an increase in juvenile cutthroat trout in recent years, viewed as an encouraging signal that the lake trout removal program's effects are significant, and making a major contribution to the preservation of Yellowstone cutthroat trout.



Yellowstone cutthroat trout.

NORRIS "ANNUAL DISTURBANCE" TRACKED

For the first time, the "annual" thermal disturbance at Norris Geyser Basin was documented by temperature loggers, which clearly showed that it began on July 11. At the beginning of 2003, YCR geologists placed thermal loggers on Steamboat and Echinus geysers in Norris Geyser Basin. The logger at Echinus Geyser clearly showed the timing of the "annual" disturbance at Norris Geyser Basin, erupting at irregular intervals before the thermal disturbance, but exhibiting a more predictable interval of three-and-a-half hours immediately after the disturbance. Changes in the thermal activity of Porkchop, Pearl, and Vixen geysers and other thermal features were noted by the Norris Geyser Basin interpretive staff, YCR geology personnel, and volunteers



Thermal loggers installed at Steamboat Geyser helped track this year's "annual thermal disturbance" at Norris.

during July and August. On these hot summer days, the sickeningly-sweet smell of cooking vegetation was especially prevalent in the area around Son of Green Dragon. At the time of the thermal disturbance, a new thermal feature near Son of Green Dragon erupted hot, acidic mud onto a portion of the Back Basin Trail. Concern for visitor safety prompted the placement of additional temperature loggers within the Norris area and the closure of some trails on July 23. The temperature loggers enabled YCR geologists to document and monitor the consistent, near-boiling (94°C, 199°F) temperatures. NPS monitoring of near-surface ground temperatures along the Back Basin Trail showed near-boiling ground temperatures until October 2003, when a decrease in temperatures prompted the opening of the majority of the Back Basin Trail. The portion of the Back Basin Trail between Pearl Geyser and Son of Green Dragon continues to exhibit thermal activity and unstable ground. A reroute of this portion of the Back Basin Trail is planned for spring 2004.

TRIBAL MEMBERS CONTRIBUTE TO INTERPRETIVE MEDIA PROJECTS

Six elders from three tribes visited Yellowstone National Park (YNP) in September to see the war sites from the Nez Percés' 1877 trek through the park. They were also interviewed; their information will inform the development of visitor educa-

tion media (wayside exhibits, a brochure, and a CD) for the Nee-Mee-Poo National Historic Trail as it passes through Yellowstone. By developing new media and updating the existing signage in cooperation with tribal governments and elders, YNP hopes to provide a broader historical context for the events of 1877 and reflect the perspectives of Nez Perce descendants. Participants this year included Agnes Davis, Ruth Wapato, and Albert Andrews Redstar of the Confederated Tribes of the Colville Indian Reservation; Lydia Johnson, Myna Tovey, Leah Conner, and Roberta Conner of the Confederated Tribes of the Umatilla Indian Reservation; and Marcus Oatman of the Nez Perce Tribe. All three tribes are equal partners with YNP on this project, are providing oral histories that will be used in the CD, and are taking significant roles in writing and illustrating materials for the wayside exhibits and



Lucille Pocatello contributed to oral history interviews concerning traditional uses of Yellowstone by the Shoshone-Bannock Tribes.

visitor education brochure. Final products will be reviewed and approved by the three tribes.

To assist with the development of exhibits for the new Canyon Visitor Education Center, the park anthropologist and park videographer traveled to record interviews with two Shoshone-Bannock elders, Walter Nevada and Lucille Pocatello, in March. Both have knowledge of their ancestors' use of the Yellowstone area; Mr. Nevada is a Lemhi Shoshone, and Ms. Pocatello is of both Bannock and Shoshone ancestry. These individuals shared information about plant collecting, trails, precontact lifestyles, place names, and the use of obsidian by Shoshone and Bannock peoples.

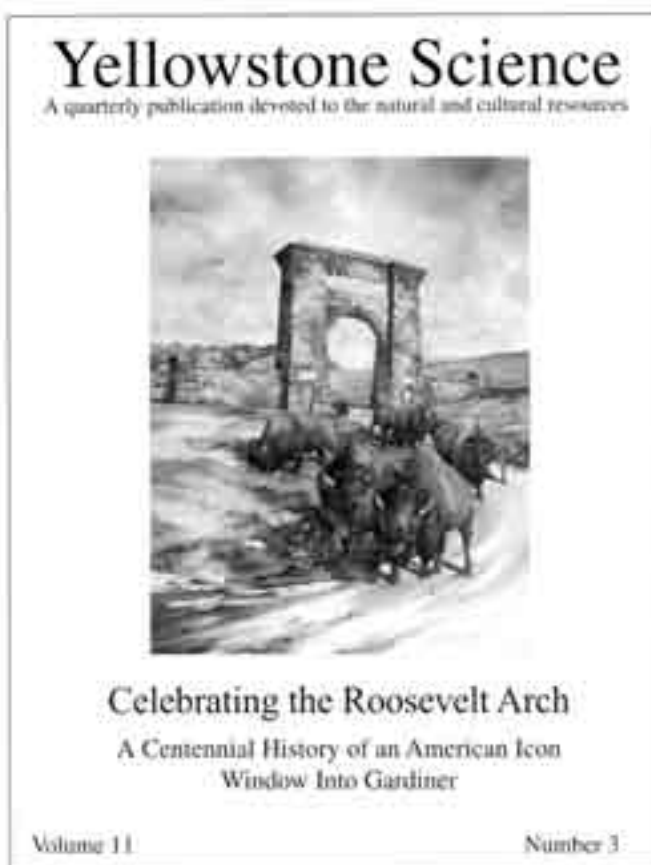
TAUCK VOLUNTEER PROGRAM

A new, experimental volunteer program, funded by the Tauck Foundation, was initiated this year with the Tauck World Discovery travel company and related Tauck Bridges travel programs. In December 2002, Tauck World Discovery contacted the Branch of Cultural Resources concerning the possibility of giving their clientele the opportunity to volunteer in YNP during summer 2003. The park historic architect met with Tauck's tour directors about the historic built environment of the Old Faithful and Lake areas, and discussed some identified needs in those areas. The Tauck Foundation awarded the Yellowstone Park Foundation (YPF) an initial \$20,000 grant, which allowed YPF to initiate a contract with Bruce Fladmark, retired cultural resource coordinator for Glacier National Park. The program began in mid-May 2003. The U.S. Postal Service and Xanterra also became involved in preserving structures, performing landscape reclamation, cleanup, staining, and painting a wide variety of structures and picnic area features at Lake and Old Faithful. In all, eight picnic areas, two amphitheatres (Bridge Bay and Fishing Bridge), two ranger stations, and six historic buildings in four historic districts received attention. Approximately 1,600 volunteers worked this summer, with almost 3,000 hours of volunteer effort going into these areas. The project was very successful; in a survey of nearly 500 participants, 85% felt that volunteering had enhanced their tour of the park, 92% enjoyed the feeling of "giving back" to the park, and 99% said they were

likely to volunteer again. Plans are to continue the program next year, and expand it into other national parks.

ROOSEVELT ARCH CENTENNIAL CELEBRATION

The park celebrated the 100th anniversary of the Roosevelt Arch on August 25, 2003, with a gala event. All of the park's divisions helped in some way to make the celebration a success; YCR's contribution included a special issue of *Yellowstone Science* devoted to the history of the arch, written and produced by staff from the Branch of Cultural Resources and the Resource Information and Publications Team. Museum staff curated an exhibit of historic vehicles, and the park historian reviewed an event brochure produced by the Division of Interpretation. Employees from multiple YCR branches helped with overall event planning.



YCR's contributions to the Roosevelt Arch centennial celebration included a special issue of *Yellowstone Science*.

MAINTENANCE UTILITY MAPPING PROJECT TAKES OFF

In 2003, Spatial Analysis Center staff initiated a collaborative project with the park's Division of Maintenance to locate and document, with sub-meter accuracy, all of Yellowstone's water and wastewater components. This project will greatly improve the Maintenance Division's ability to manage its facilities, because the locations of sewers, valves, and other elements were previously recorded only in employee memory or on paper maps that date from 1968–1985, and in some cases are not known with good reliability. The success of the project depends heavily on existing staff knowledge of true locations. New GIS layers were created using GPS, and will be managed and maintained within a GIS database. The new layers include manholes, sewer mains, cleanouts, lift stations, valves, water mains, and hydrants. Using the new data, staff can create up-to-date maps with accurate and reliable information. Areas completed include Old Faithful, Canyon, Grant, West Thumb, Lewis Lake, South Entrance, Madison, West Entrance, and Bechler. Areas partially done include Mammoth, Lake, Bridge Bay, and Fishing Bridge. The locations of approximately 750 manholes, 25 miles of sewer mains, 320 hydrants, and 1,100 valves were recorded as of November 2003.

NEW ELK RESEARCH

During May 2003, the Yellowstone Center for Resources, U.S. Geological Survey, and University of Minnesota initiated a three-year study (FY03–05) of mortality in northern Yellowstone elk calves. The

primary objectives of the study are to: 1) estimate the relative causes and timing of calf deaths; 2) estimate calf survival rates; and 3) evaluate factors that may predispose calves to death. During May–June 2003, a total of 51 calves ≤ 6 days old were captured and fit with ear tag transmitters. These calves were subsequently monitored on approximately a daily basis. During May–September 2003, 34 instrumented calves died (31 predation, 3 other causes) and one transmitter ceased functioning. Preliminary determinations of causes of death for instrumented calves were 19 killed by bears, 5 killed by wolves, 3 killed by coyotes, 2 killed by either wolves or bears, 1 killed by a mountain lion, 1 killed by a wolverine, and

3 non-predation deaths due to unknown causes. Monitoring of instrumented calves will continue through winter 2004, and the next capture is scheduled for May–June 2004.



Elk calf released after tagging.

YELLOWSTONE SAND VERBENA STUDIED

Yellowstone sand verbenas [*Abronia ammophila* Greene], is an endemic species of Yellowstone National Park that has a very restricted distribution along the shoreline of Yellowstone Lake. Because the total number of individuals of this species is very low, one of the concerns associated with man-

aging this unique plant is whether the sand verbenas are dependent or limited by the presence (or absence) of pollinators. A research project funded by Canon, U.S.A.'s *Eyes on Yellowstone*, with a matching grant from the National Fish and Wildlife Foundation's Native Plant Conservation Initiative, has enabled the park to contract with Dr. Sedonia Sipes, Assistant Professor, Department of Plant Biology, Southern Illinois University-Carbondale, to research the

breeding system of Yellowstone sand verbenas. During the summer of 2003, a combination of observational data and hand-pollination experiments were performed that will determine if *A. ammophila* has an autogamous, out-crossing, or mixed breeding system. These investigations were also designed to provide information on the floral phenology and the timing of stigma receptivity and pollen viability.

The data from the summer pollination experiments are currently being analyzed. It was observed last summer that the flowers open up at night and produce a noticeable scent, making access to individual flowers possible for pollinators. During the summer fieldwork, several potential bee and moth pollinators were observed visiting the flowers. These

species will be identified during the winter months and examined for the presence of pollen. The viability of the pollen was investigated in flowers of various age. By the third day after blooming, the pollen was no longer viable, so pollinator visitation must be coordinated with the first or second day after the flower opens to be successful. The most interesting finding to date is that it appears that the plants are autogamous (self-compatible), and are apparently producing viable seed without any pollinator present. The actual viability of these seeds will be investigated with tetrazolium viability tests. This result is surprising, because other members of the genus that have been investigated were found to be obligate out-crossers.



Yellowstone sand verbenas study site.



Former YCR museum technician Kirk Dietz assists with interpretation of historic vehicles displayed at the Roosevelt Arch centennial celebration.

Part II. Cultural Resource Programs

This section describes the work accomplished or coordinated by YCR staff who comprise the following units of the Branch of Cultural Resources:

- **Archeology.** These staff are responsible for inventories, trails rehabilitation, wildland-urban interface issues, obsidian studies, and multiple property documentations;
- **Ethnography.** These staff are responsible for intergovernmental meetings, ethnographic resources, assistance to park-associated tribes, and education opportunities for tribes, park staff, and the public;
- **History.** These staff are responsible for historic structures, National Register listings, compliance, and research; and
- **Museum, Library, and Archives.** These staff are responsible for collections preservation, conservation, and access, acquisitions, research and technical assistance, and the new Yellowstone Heritage and Research Center.

ARCHEOLOGY

The park Archeology Program had another busy year in 2003. The number of documented sites in the Archeological Sites Management Information System is now 1,169, and is clearly a small fraction of the total universe. Environmental compliance remains a primary duty, and includes projects carried out both by the park archeologist and by contractors whose reports are reviewed and sent on to the State Historic Preservation Offices. Inventory for the Gardiner multiplex in Gardiner, Montana, resulted in documentation

of both a multi-component campsite and the extension of the Northern Pacific Railroad's Yellowstone Park Line into Gardiner. The campsite fits the settlement pattern of prehistoric sites on the Yellowstone River in the park above and below Gardiner. Volunteers continue to assist with programmatic accomplishments, and are integral to success.

Southeast Arm of Yellowstone Lake Inventory

Park archeologist Ann Johnson and seven volunteers spent nine days around the Southeast Arm of Yellowstone Lake in FY03. The purpose of this work was to obtain an archeological inventory for a remote area where sites were expected to be eroding, and where camping and fishing activities leave sites vulnerable to unauthorized collection. Inventory of about four miles of lakeshore and six miles of adjacent backcountry trails resulted in the identification of seven new prehistoric sites, with revisits to three previously-recorded sites. Group members also identified 49 species of birds, and wolves were heard howling each day. New insights into settlement patterns (prehistoric use of the area) were gained; it was learned that early people did not restrict their use of the area to just the shoreline.

Trails Rehabilitation

Cooperation continued with the trails maintenance group. A section of trail west of the Hellroaring Creek crossing was inventoried. Several locations were also investigated around Cliff Creek. In each case, the trails need to be moved to improve safety and decrease environmental impacts. Although no archeological resources were found in either inventory area, the archeology program benefited as the park archeologist gained new knowledge about different parts of the backcountry.

Wildland-Urban Interface

Seven backcountry cabin areas were inventoried in support of the Wildland-Urban Interface effort to decrease the threat of fire to these developments. Archeological resources were identified at two cabins, one of which was previously unknown. There is no archeological inventory of the Yellowstone River valley south of Yellowstone Lake, and a trip to the Thorofare cabin provided insights into the local environment, such as climatological and topographical differences from most of the rest of the park.



DANE HARGREAVES

Park archeologist Ann Johnson (left foreground) and volunteers document the Schaller site at the Southeast Arm of Yellowstone Lake.

Consequently, the archeological staff has a better understanding of probable precontact uses of the area.

Obsidian Studies

A visit was made to Park Point to search for a geological source for obsidian that produces a particular elemental signature; that source was not found. Whether another location is actually the geological source for the volcanic tuff called Park Point is being evaluated.

Work by Cooperators

The Federal Highway Administration's archeological program finished a number of small project area inventories and gathered data for National Register (NR) evaluations. The Office of the Wyoming State Archaeologist (OWSA) inventoried at the Tower Fall and Norris Junction areas; no archeological components were found. The historic component of site 48YE14 was documented and evaluated. A

data recovery plan was prepared for site 48YE128 on the Mammoth-to-Norris Junction road segment and submitted to the Wyoming State Historic Preservation Office for review.

In Mammoth Hot Springs, the area proposed for the new courthouse received both traditional inventory and remote sensing by OWSA. This area was known to be the location of the Yellowstone Park Transportation Company's bus barns that burned to the ground in 1925, with all the buses in them. The investigations showed that the area was intensively cleaned up after the fire; very little remained of the structures and their contents.

As part of the National Register evaluation project of endangered archeological resources, sites 48YE1269 and 48YE1278, on the Lamar River, were tested. These both contained chipped stone, animal bone, and fire-cracked rock. The analyses are not yet complete, but 48YE1269 contained bison, beaver, elk, and domestic dog. Park staff members await dating and interpretations of this site.

The Museum of the Rockies (Montana State University) completed a report on testing of nine prehistoric sites on the Mammoth-to-Gardiner road segment and worked on the data recovery report at the Osprey Beach site, the 9,400-year-old campsite on Yellowstone Lake.

Multiple Property Documentation

On August 1, cultural resources employee Elaine Hale was conferred the degree of Master of Science in Anthropology from the University of Montana at Missoula. Elaine's major study area was in Plains and Great Basin archeology, with an additional endorsement in cultural resource management. Her research topic was prehistoric archeology in YNP, resulting in a thesis titled, *A Culture History of the Yellowstone River and Yellowstone Lake, Yellowstone National Park, Wyoming and Montana*. Elaine was converted to the position of archeologist with the Branch of Cultural Resources, having completed her M.S. while working under the Student Career Experience Program.

Hale's prehistoric culture history of the Yellowstone River corridor and lakeshore was expanded into a National Register Multiple Property Document (MPD) providing information on common or shared properties of Yellowstone's early archeological remains, and regional information

with which to compare Yellowstone's archeological resources. A component of the document identifies important archeological data and lists topics of research addressing the Yellowstone River corridor and Yellowstone Lake shore area. The MPD, titled "Precontact Archeological Sites Along the Yellowstone River and Yellowstone Lake, Yellowstone National Park, Montana and Wyoming," will simplify and facilitate National Register nominations for many of the park's prehistoric archeological sites. The Montana and Wyoming state archeologists, National Register staff, and archeological contractors who have conducted archeological investigations along the Yellowstone River corridor and Yellowstone Lake shore are completing peer review of the document, after which it will be available for public review. The final document will be posted on both the Montana and Wyoming Historic Preservation Office websites.

Assistance to Other Parks

The park archeologist helped Fort Laramie National Historic Site to obligate Year II of their archeological inventory project, and reviewed the annual report for that work. An excavation project was monitored at Grant-Kohrs Ranch National Historic Site, and the scope of work for an archeological inventory and subsequent report at Grant-Kohrs were reviewed. The Museum of the Rockies completed the technical synthesis for the parkwide archeological inventory at Glacier National Park; Yellowstone's archeologist was the contracting officer's representative on that project. This report (B.O.K. Reeves, 2003. *Mistakis: The Archeology of Waterton-Glacier International Peace Park*) will be the most important archeological reference for Glacier and northern Montana for future decades. The report is also applicable to Yellowstone, as many of the same precontact cultural groups are represented in intermountain settings at both parks.

Volunteers

Volunteers continue to provide important support to the archeology program, donating over 2,000 hours in FY2003. John Reynolds and Diane Hargreaves made great progress toward completing cataloging of artifacts from the Fountain, Soda Butte, and Tower Soldier Stations by creating and then entering more than 2,000 catalog records. Bob

Wilkins applied his organizational skills to materials in storage at the Gardiner Scout House and Mammoth Nature Store. This was very timely, as preparations began for the move to the new Yellowstone Heritage and Research Center in FY04. Mary Meagher accompanied the park archeologist on most backcountry trips, providing the history of many areas and other information such as the location of the original Cabin Creek cabin.

Volunteers from Wichita State University inventoried the Yellowstone Lake shore from Fishing Bridge east to Mary Bay. This provided monitoring of known sites, and an eroding hearth was salvaged.

ETHNOGRAPHY

Work continued this year on gathering the oral histories and traditions of some of the park's 26 affiliated tribes. The new data informed proposed park exhibits in visitor education centers, helped with compliance and planning processes, and is being entered into a computerized database for use in future activities. As an outcome of a cooperative effort, a park-associated tribe produced the first-ever film about their Yellowstone connections. Another first occurred this year as Yellowstone National Park's Ethnography Program partnered with two other Greater Yellowstone Ecosystem (GYE) federal entities to successfully compete for funding of research that contributes to an understanding of American Indian histories and resource uses in Yellowstone and the GYE. Newly-hired cultural resources technician Tasha Felton assisted with management of two databases, one containing over 700 tribal contacts and other parties interested in American Indian issues at YNP, and the other an e-mail list of park-associated and bison-interested tribal members used by various park divisions to inform tribes of park activities. She also assisted



Park archeologist (third from right) and volunteers on the Southeast Arm archeological survey.

with entering data regarding more than 25 park resources into an ethnographic database, and helped coordinate consultation events for the various visits tribal peoples made to Yellowstone for governmental, research, and visitor education purposes. Tasha's assistance freed time for park anthropologist Rosemary Sucec to write funding proposals and scopes of work; manage contracts; address the more complex questions and needs of the 26 park-associated and 54 bison-interested tribes; consult with other park divisions regarding their needs and requests for help; provide training for divisions and partners; and conduct oral history interviews with tribal elders. Volunteers continued to provide invaluable work.

Intergovernmental Meetings

Spring consultation meeting at Yellowstone. More than 55 individuals, representing 21 tribes and one pan-Indian organization, attended the June 5 government-to-government consultation with park-associated and bison-interested tribes. These tribes included the Blackfeet; Cheyenne River Sioux; Coeur d'Alene; Confederated Salish & Kootenai; Crow; and Eastern Shoshone Tribes; the Ho-Chunk Nation; Iowa Tribe of Oklahoma; Mesa Grande Band of Mission Indians; Modoc Tribe of Oklahoma; Nez Perce; Northern Arapaho; and Oglala Sioux Tribes; Oneida Tribe of Indians

of Wisconsin; Picuris Pueblo; Pojoaque Pueblo; Rosebud Sioux Tribe; Sandia Pueblo; Shoshone-Bannock Tribes; Taos Pueblo; and the Yankton Sioux Tribe. The Intertribal Bison Cooperative (ITBC) held their quarterly meeting in Gardiner, Montana, to coincide with the park's meeting, which was attended by a strong contingent of ITBC members. Park staff who attended and participated in the meeting included Deputy Superintendent Frank Walker; YCR Director John Varley, Cultural Resources Branch Chief Sue Consolo Murphy; supervisory biologist Glenn Plumb, Bison Ecology and Management Office biologist Rick Wallen; archeologist Ann Johnson, Federal Highways compliance specialist Elaine Hale; and cultural anthropologist Rosemary Sucec. Issues discussed include the following:

- An update on bison management and the Interagency Bison Management Plan for the Yellowstone herd (YNP made a commitment to try to bring the various agencies together to discuss the quarantine issue);
- The bison and elk management planning process underway at Grand Teton National Park and the National Elk Refuge;
- Development projects proposed or underway in Yellowstone;
- An update on cultural resource issues at Yellowstone and Grand Teton national parks;
- The construction of Yellowstone's new

Heritage and Research Center; and

- A discussion of a recently funded proposal to synthesize knowledge about wickiups in Grand Teton, Yellowstone, and the Bridger-Teton National Forest.

A representative from the Shoshone-Bannock Tribes expressed a desire that the park interpret a section of the Bannock Trail. The Eastern Shoshone Tribe requested that the park include more information about associated tribes in the visitor centers. A transcript of the proceedings is available from the park anthropologist.

On the evening of June 5, a community potluck, co-sponsored by Yellowstone National Park and the Bear Creek Council, welcomed tribal members, National Park Service (NPS) employees, and community members. As many as 170 people attended. The Cheyenne River Sioux Tribe generously donated bison meat. Toward the end of the evening, YNP Deputy Superintendent Frank Walker honored Oglala Sioux member Elaine Quiver, a longtime friend of Yellowstone, with a Yellowstone National Park commemorative coin. The floor was then opened to all, and attendees amicably voiced their concerns about the current bison management policies and shared stories about buffalo.

Ethnographic Research and Management

Ethnographic survey of the Mammoth Hot

Springs-to-Norris Junction

Road. Yellowstone National Park contracted with two entities to conduct surveys and write reports detailing ethnographic resources (i.e., places, sites, objects, and natural resources that traditionally-associated peoples define as continuing to have significance to their present way of life) along a road corridor that will be rehabilitated as part of a 20-year plan to upgrade roads in the park. This year, the Shoshone-Bannock Tribes and the University of Wyoming submitted drafts of their reports. The University



Representatives from the Shoshone-Bannock Tribes rest during their ethnographic survey of the Mammoth-to-Norris road segment.

of Wyoming consulted with 25 of the park's 26 associated tribes, while the Shoshone-Bannock Tribes, given their lengthy and complex association with the park, conducted their own survey. Both previously known and new ethnographic resources were identified in both reports, and the park was provided with information about the cultural significance of these resources. Both reports acknowledged that the road reconstruction as currently proposed will not affect the ethnographic resources they identified, but cautioned that should road plans change, the road work should not interfere with those resources.

Oral history interviews with members of Shoshone-Bannock Tribes. To assist with the development of exhibits for the new Canyon Visitor Education Center, the park anthropologist and park videographer (Jim Peaco) traveled to record interviews with two Shoshone-Bannock elders, Walter Nevada and Lucille Pocatello, in March. Both have knowledge of their ancestors' use of the Yellowstone area; Mr. Nevada is a Lemhi Shoshone, and Ms. Pocatello is of both Bannock and Shoshone ancestry. These individuals shared information about plant collecting, trails, precontact lifestyles, place names, and the use of obsidian by Shoshone and Bannock peoples.

Interpretive media for the Nez Perce (Nee-Mee-Poo) National Historic Trail (NPNHT). On May 12–13, Jo Suderman, exhibit specialist from the Division of Interpretation, and Rosemary Sucec consulted with representatives of the Gallatin National Forest about designing trail waysides, with the goal of having coordinated, consistent interpretation across the forest and park segments of this stretch of the NPNHT. Sites in Silver Gate and Cooke City, Montana, as well as locations within the park were toured.

On September 16–19, six elders from three tribes visited YNP to see the 1877 war sites in the park and be interviewed so that their information can inform the development of visitor education media (wayside signs, a brochure, and a CD) for the trail through Yellowstone. Existing park media consists of an outdated roadside sign at Nez Perce Creek. By developing new media and updating the existing signage in cooperation with tribal governments and elders, YNP hopes to provide a broader historical context for the 1877 trek through the park and reflect the perspectives of Nez Perce descendants. Participants

this year included Agnes Davis, Ruth Wapato, and Albert Andrews Redstar of the Confederated Tribes of the Colville Indian Reservation; Lydia Johnson, Myna Tovey, Leah Conner, and Roberta Conner of the Confederated Tribes of the Umatilla Indian Reservation; and Marcus Oatman of the Nez Perce Tribe. All three tribes are equal partners with YNP on this project, are providing oral histories that will be used in the CD, and are taking significant roles in writing and illustrating materials for the wayside exhibits and visitor education brochure. Final products will be reviewed and approved by the three tribes.

On September 16, elders and other project participants toured the 1877 war sites. John Lounsbury, a retired district ranger who has taken a keen interest in the trail, relayed his knowledge of the events surrounding the capture of tourists. He also shared his intimate knowledge of park topography, which helped to shed some light on the route the Nez Perce took through the park that year. On the following day, elders met collectively and then individually to be recorded. They talked about their knowledge of the 1877 war, Nez Perce presence in Yellowstone before the war, the legacy of the war, and their impressions of the park.

This phase of the project was generously funded by the National Park Service Challenge Cost Share Program, the administration of the Nez Perce National Historic Trail, the Nez Perce National Historic Trail Foundation, and Yellowstone National Park. Completing production of the wayside signs, brochure, and CD will require additional funds, and funding sources for the remaining work are being actively investigated. If sufficient funding is obtained, the CD, wayside exhibits, and visitor education brochure will be premiered in summer 2006. In association with the event, the park hopes to host the 2006 annual meeting of the Nez Perce National Historic Trail Foundation. The park anthropologist attended the annual meeting of the Nez Perce National Historic Trail Foundation in Chinook, Montana, on August 1–2, where she gave a presentation on the work completed on this project to date.

Bannock Trail research. On June 10, the Branch of Cultural Resources took a field trip to segments of the trail in the Blacktail Deer Plateau area that likely have the greatest integrity. Past research was discussed, as well as the current state of knowledge

about the trail, and the group brainstormed ideas for conscious management of it. The Shoshone-Bannock Tribes have asked the park to develop a management strategy for the trail, possibly including a National Register nomination and/or incorporation into the National Trails System. Throughout the summer, Tasha Felton and Rosemary Sucec hiked the Blacktail segments with a GPS unit; the resulting data were converted into a preliminary GIS map of the Bannock Trail. Digitized images were made of the 1878 Hayden map that demarcates the trail in the park.

“Before Yellowstone” film. Through a Challenge Cost Share grant with Yellowstone National Park and contributions from the park, the Confederated Salish & Kootenai Tribes completed a seven-minute film entitled *Before Yellowstone*, which captures the



Cultural resources technician Tasha Felton researches remnants of the Bannock Trail at Blacktail Deer Plateau, summer 2003.

essence of Salish presence in the Yellowstone area before it became a national park. It is a short but compelling account, most of it in Interior Salishan with subtitles. One of the highlights of the film is a segment addressing why Euroamericans believed Indians were afraid of the boiling springs and geysers. According to the Salish, they did not want the newcomers to bother the spiritually and medicinally potent sites so they told them not to go there. The Euroamericans, however, interpreted this information as fear of such places. Information from the film has already been integrated into the new

Canyon Visitor Education Center exhibit, into the Ethnographic Resources Inventory database for planning and management purposes, and used by park interpreters for their programs.

Multi-component ethnographic and traditional use study. In FY03, Yellowstone National Park, Grand Teton National Park, and the National Elk Refuge, through a cooperative agreement, proposed and received funding to conduct work with certain tribes to learn their historic uses of natural resources in all jurisdictions. Before the traditional use studies are launched in 2004, an ethnographic overview and assessment, also funded, will enable Grand Teton and the refuge to receive a baseline report that identifies American Indians associated with their jurisdictions. A scope of work was written for the ethnographic overview and assessment, and a contract let in 2003, with work to be completed in fall 2004. The work consists of a review of historical documents and archeological evidence, with some supplementation through tribal oral history interviews.

Wickiup study.

Yellowstone National Park, Grand Teton National Park, and the Bridger-Teton National Forest submitted a grant application to synthesize information about the wickiups in the three jurisdictions into a report. The two-phased proposal was funded. A scope of work will be written in 2004. In the first year, a litera-

ture review will be conducted in addition to interviews with tribal elders, with the report written in the second year. From the information, the national parks and forest will determine a management strategy for wickiups in their respective jurisdictions. The tribes that have expressed that their ancestors used wickiups include the Crow, Eastern Shoshone, Shoshone-Bannock, and Blackfeet.

Ethnographic Resources Inventory (ERI) database. Information regarding 25 park ethnographic resources was entered into the ERI database in FY03. The ERI houses information about resources

within Yellowstone that park-associated tribes have identified as having historical and contemporary meaning to them, such as animals like bison, places like Obsidian Cliff, specific hydrothermal features such as Dragon's Mouth and Mud Volcano, and plants such as bitterroot and lodgepole pine. A typical ERI entry might include information such as UTM's, scientific names, site topography, uses and meanings associated with the resource by specific tribes, resource condition, management recommendations made by associated tribes, images of the resource, and contact information about tribes that have an association with it. The database assists in park compliance, planning, management, and visitor education. The park anthropologist is a member of the national NPS committee that addresses issues related to the ERI software and implementation of the ERI servicewide. Three conference calls this year focused on testing a revised version of the ERI software, also tested at YNP. Feedback from the trial will be incorporated into a new, improved version to be released in 2004. The park database, now in its third year, includes information from consultations, ethnographic and historical documents, archeological sites, and recordings from oral history interviews. The database is becoming a useful tool in piecing together the multitude of meanings any given park natural resource possesses, usually to a multitude of tribes.

Assistance to Other Park Divisions

Staff reviewed and contributed text to several environmental planning documents, including the West Entrance Station Environmental Assessment (EA), Stephens Creek development EA, and winter use Environmental Impact Statement. Consultation on the Artist's Point cultural landscape was completed. Staff also consulted with the Office of Planning and Compliance about their mailings to park-associated tribes.

The Public Affairs Office (PAO) requested help, on behalf of a filmmaker, in identifying any tribes with accounts about the Grand Canyon of the Yellowstone. Elder Grant Bulltail, a descendant and representative of the Mountain Crow, possesses an account of a young Crow man's heroism in associa-

tion with the canyon. He provided that information for the PBS series, *The Grand View*, which featured national parks through the eyes of artist Stephan Baumann. Staff also assisted the PAO with invitations to tribes for the August Roosevelt Arch centennial celebration.

The Resource Management and Visitor Protection Division requested assistance in recruiting one to two Native American youths to participate in the Youth Conservation Corps program in summer 2003. Tasha Felton helped Steve Sarles select the participants.

Extensive work was accomplished in collaboration with the Division of Interpretation. For the new Canyon Visitor Education Center, the park anthropologist, in consultation with the 26 park-associated tribes, provided information about American



YCR Director John Varley and park anthropologist Rosemary Sucec present Elaine Quiver of the Oglala Sioux tribe with a gift in thanks for her elder leadership with the Lone Man School's *Expedition Yellowstone!* visit.

Indians' association with park features including Obsidian Cliff, Yellowstone Lake, Dragon's Mouth/Mud Volcano, the Mammoth Terraces, and Liberty Cap. Individuals in tribes assisted with writing the text, providing pictures, and approving the text that went into the new exhibits. The park photographer videotaped oral histories in conjunction with the park anthropologist, as described above.

The park anthropologist provided some training about tribal relations to the staff of *Expedition Yellowstone!* and acted as consultant when groups from the St. Labre and Lone Man schools came to

Yellowstone. At least one publication (*Yellowstone Resources & Issues 2003*) was reviewed, and assistance was provided to at least five seasonal interpreters in developing their presentations for visitors. Four publications were reviewed that the Yellowstone Association was considering as sales items in their park stores.

Assistance to Tribes and Other Partners

The park anthropologist received numerous calls throughout the year from park-associated and bison-interested tribes. Topics included bison management, the status of wolf reintroduction, and the park's collection policy. Tribes also received electronic press releases from the Public Affairs Office, electronic job announcements from the Division of Administration, and hard copies of grant applications from national programs in the federal government, particularly from the NPS's Division of Cultural Resources and Stewardship. Calls were received from other parks, including Glacier National Park and Grand Canyon National Park, about Yellowstone's tribal consultation program.

Educational Opportunities

American Indian opportunities. Eastern Shoshone and Northern Arapaho children from the Wyoming Indian School toured the Stephens Creek bison capture facility with Rick Wallen and Rosemary Sucec. The youths, who had studied the Yellowstone bison management issue in their spring semester, presented the park with a resolution they composed regarding management of Yellowstone bison. Northern Cheyenne college students from Chief Dull Knife Community College at Lame Deer, Montana, toured the park and learned about job opportunities. Participants in the *Expedition Yellowstone!* environmental education program included Crow, Northern Cheyenne, and Assiniboine youths from the St. Labre Schools at Lame Deer, Ashland, and St. Xavier, and children from the Oglala Sioux Tribe from the Lone Man School on the Pine Ridge Reservation. Summer school students from the University of Oklahoma attempted to retrace the migration route of the Kiowa people, with assistance from Tasha Felton.

Park staff and visiting public opportunities. In June, at Old Faithful, Canyon, and the Indian Creek campground, two representatives (Lynn

Beam and Diane Amiotte) from the Intertribal Bison Cooperative provided information to the visiting public and park staff about the traditional uses of buffalo by Plains tribes. From June 13–15, Rosemary Sucec taught a Yellowstone Association Institute (YAI) class, "Native Yellowstone," about the park's native heritage, including a discussion of past, present, and future relationships with the Native American tribes associated with Yellowstone. With park historian Lee Whittlesey, she team-taught a YAI backpacking course on the 1877 route of the Nez Perce from Lamar Valley to Sunlight Basin. The hikers attempted to replicate one of the likely routes the Nez Perce used on the east side of the park, trekking up Miller Creek, over Bootjack Gap, and down Crandall Creek in the Sunlight Basin area.

Volunteers

Again this year, volunteers Jamie Cox, Jon Dahlheim, George Nell, Robert Nikol, Sandra Nykerk, and Ardyth Wendt provided numerous hours of work. They listened to oral history interviews and corrected transcripts of them, conducted research, helped with filing and organizing, and assisted with events and fieldwork.

HISTORY

Historic Structures Program

Tauck volunteer program. A new, experimental volunteer program, funded by the Tauck Foundation, was initiated this year with the Tauck World Discovery travel company and related Tauck Bridges travel programs. In December 2002, Tauck World Discovery contacted the Branch of Cultural Resources concerning the possibility of giving their clientele the opportunity to volunteer in YNP during summer 2003. The park historic architect, Herb Dawson, traveled to Las Vegas for the annual meeting of Tauck's tour directors, and in partnership with Tauck's public relations coordinator, gave a PowerPoint presentation on the historic built environment of the Old Faithful and Lake areas. The presentation demonstrated some identified needs in those areas. It was hoped work on historic structures would be funded, as this was the focus of the company's volunteer efforts in other parks. The Tauck Foundation awarded the Yellowstone Park

Foundation (YPF) an initial \$20,000 grant, which allowed YPF to initiate a contract with Bruce Fladmark, retired cultural resource coordinator for Glacier National Park. The program began in mid-May 2003. The U.S. Postal Service and Xanterra also became involved in preserving structures, landscape reclamation, cleanup, staining, and painting a wide variety of structures and picnic area features at Lake and Old Faithful. In all, eight picnic areas, two amphitheatres (Bridge Bay and Fishing Bridge), two ranger stations, and six historic buildings in four historic districts received attention. Approximately 1,600 volunteers worked this summer, with almost 3,000 hours of volunteer effort going into these areas. The project was very successful; in a survey of nearly 500 participants, 85% felt that volunteering had enhanced their tour of the park, 92% enjoyed the feeling of “giving back” to the park, and 99% said they were likely to volunteer again. Plans are to continue the program next year, and expand it into other national parks.

Virginia City grant administration. In February 2003, the assistant regional director for cultural resources requested that the park historic architect be appointed the on-site grant coordinator for the \$1.8 million NPS grant to the Montana Heritage Commission. Consequently, the historic architect’s duties expanded to include consultation with the Montana State Historic Preservation Office (MTSHPO), the Montana Heritage Commission, and the staff of the commission, along with the consultants. Work involves stabilizing more than 250 structures, as well as restoration and rehabilitation of nationally-significant historic properties that are one of the most intact groups of mid-19th century mining town structures in the United States.

List of Classified Structures. Work continued on inventorying properties that are being identified for inclusion on the List of Classified Structures (LCS), a servicewide computer system that itemizes known historic structures in every NPS unit. The historic architect worked with the LCS team



Tauca World Discovery volunteers apply stain to the exterior of the Old Faithful Inn Laundry.

from the Intermountain Support Office (ISO) on several occasions during FY03. In January, cultural resources staff sponsored a training session for YNP employees involved in planning and executing projects on historic properties. The class had approximately 15 attendees.

Next season’s work was discussed with the ISO LCS team, and the team was provided with information on properties, such as determinations of eligibility and historic structures reports. The team also toured sites in the park, including stops at Canyon and the Norris administrative area and batch plant, to look for a U.S. Air Force (USAF) missile trailer that was reputed to be in YNP. Long-time employees in the Canyon–Norris area were asked about the possible whereabouts of this rare Cold War artifact. If located, the missile trailer would be used as part of an interpretive display at the new Minuteman Missile National Historic Site in South Dakota. Three surplus USAF trailers were located, most of which were systems trailers used to transport and work on guidance and atomic weapons systems. None, however, was large enough to transport a 60-foot missile body.

Properties inventorying continued in the Roosevelt Lodge Historic District, the Tower Junction area, Lamar Buffalo Ranch, Northeast Entrance Station, Old Faithful, East Entrance area, Fishing Bridge, and Mammoth Hotel areas. In 2004, the historic architect will assess the conditions of

properties in the Fort Yellowstone National Historic District.

Many of the historic buildings were identified only by photograph, including tourist cabins from Fishing Bridge, Old Faithful, and West Thumb that were moved in the 1970s–1980s period to various locations. Many migrated to the Roosevelt and Tower areas, some to the Northeast Entrance, and some within the confines of the historic districts to which they were originally built. Identification was sometimes achieved by means of something as small as a knothole near a window on a certain board at a particular elevation. Other identification techniques included investigating building number shadows on the structures over the doors, or on the doors, or former electrical service insulators, along with other hints of a building's identity.

Monitoring of historic properties and solicitation of funding requests. Early in 2003, the historic architect drafted a large number of Special Emphasis Program Allocation System (SEPAS) funding requests for a variety of properties throughout the park, in response to the previous year's National Historic Landmark condition assessments that were sent to the regional office. The following work was planned, estimated, and/or proposed:

- Northeast Entrance Station: repair deteriorated log structural elements, and repoint flagstones around the building perimeter;
- Norris Trailside Museum: correct problems with stonework on the chimney and retaining walls of the surrounding patios of the museum building, and stabilize the log structural components of the historic comfort station, which was converted into the Yellowstone Association bookstore onsite;
- Haynes Photo Finishing Lab: stabilize the building. Tauck volunteers began preparatory work on the exterior of the building in summer 2003;
- Lake Fish Hatchery and associated cabins, office, and garage: stabilize the buildings;
- Fort Yellowstone National Historic District: stabilize the guardhouse and its deteriorating masonry walls, and write a historic structures report, preparatory to the building's being vacated, when the new Yellowstone Justice Center is constructed in FY06; and
- Apollinaris Spring: restore cultural landscape.

Unfortunately, none of these SEPAS proposals was successful (although the Apollinaris Spring project was funded by the Yellowstone Park Foundation). One project was funded late in the year from FY02 requests, and involved roof replacement on several Lake Lodge cabins, which are in danger of being lost due to deferred maintenance. Further funding for this project will be made available during FY04. It is hoped that Tauck volunteers will assist the Xanterra historic preservation crew on this project, allowing the money to go further in terms of repairs and materials.

On August 25, the park celebrated the centennial of the Roosevelt Arch at Gardiner, Montana. The historic architect assisted in planning the celebration, at which the Montana Historical Society provided the park with two large National Register plaques, one for the North Entrance Road, listed on the National Register of Historic Places in 2003, and one for the Roosevelt Arch as a contributing property of the North Entrance Road. Dr. Arnold Olsen, the director of the Montana Historical Society, presented the plaques.

National Register of Historic Places

In keeping with the National Historic Preservation Act (NHPA) and NPS management guidelines, Yellowstone's cultural resource staff continues to identify, evaluate, and nominate significant historic properties to the National Register of Historic Places. Individual structures, landscapes, archeological sites, roads, natural or cultural landmarks, and historic districts listed on or determined eligible for the National Register are maintained and managed in ways that consider the preservation of the qualities that made them worthy of such recognition. Although Yellowstone has many sites and districts that have been determined eligible for the National Register, the actual number of properties for which the lengthy nomination process has been completed is much smaller.

Fort Yellowstone. The Fort Yellowstone National Historic District was listed on the National Register of Historic Places by the Secretary of the Interior on July 31, 2003. Fort Yellowstone is significant under National Landmark criteria as the headquarters of the U.S. Army during its administration of Yellowstone National Park. The military established a headquarters tent camp at Mammoth Hot Springs,



Fort Yellowstone during the days of the park's U.S. Army administration, 1886–1918.

which evolved into Camp Sheridan (1886–1891) and Fort Yellowstone (1891–1918). While troops were used in other national parks, the army's 32 years in Yellowstone marked the military's longest and most extensive presence. In no other park was an official army fort established.

Fort Yellowstone is also significant under National Landmark criteria for the principles and policies toward conservation and national park stewardship developed by the army during its administration of Yellowstone National Park. In the process of carrying out day-to-day administrative tasks in the park, the military commanders promulgated rules and regulations that constituted a philosophy of conservation that defined the nature, characteristics, and management of national parks. During the army regime in the park, wildlife was defended and even saved from extinction, and geothermal and other natural features were protected from vandalism and destruction.

Grand Loop Road. Revision, editing, and internal review of the National Register nomination of the Grand Loop Road were completed in 2003. The draft nomination, with photographs and maps, was submitted to the Park County, Wyoming, and Teton County, Wyoming Historic Preservation Boards serving as the Certified Local Governments, and to the Wyoming National Register Committee for review and comment prior to submission to the National Register of Historic Places, expected to occur in FY04.

Corkscrew Bridge. A National Register nomina-

tion was prepared for the Corkscrew Bridge, located on the abandoned "old" East Entrance road just east of the road corridor summit of Sylvan Pass. This unique, circular underpass is visible from the current East Entrance Road alignment and is a short walking distance along the old road, accessible from the Sylvan Pass parking area. The Corkscrew Bridge represents an innovative approach to addressing steep grades, and few examples survive within the modern roadway corridors. The Wyoming State Historic Preservation Office (WYSHPO) reviewed the nomination for concurrence of eligibility prior to the upcoming road reconstruction. The nomination will be sent to

the National Register following review by the Park County, Wyoming Historic Preservation Board and the Wyoming National Register Committee.

West Entrance Road. Research and revision of the draft West Entrance Road National Register nomination began in fall 2003, in response to planning for improvements to the West Entrance Station. Proposed improvements include moving the entrance area a short distance to the east to relieve traffic congestion in the community of West Yellowstone, Montana.

Inventory and testing. The Office of the Wyoming State Archaeologist conducted pedestrian inventory on two short road segments at the Tower Fall campground and along the access road to the Norris Geyser Basin viewing area. Both inventories yielded little cultural material with no significant sites identified.

National Register testing was conducted at the extensive site of the Norris Hotel (48YE402). The site is located adjacent to the current road and possesses a substantial historic component along with what initially appears to be a significant prehistoric component. National Register testing was also conducted nearby at 48YE14, a multiple component site located in the Norris campground. The prehistoric component had previously been determined eligible.

Several reports on inventory and testing conducted in 2002 were finalized and provided to the WYSHPO for review and concurrence of site eligibility. The Glen Creek-to-Mammoth water supply

system (48YE754) was recorded and its significance assessed. It was determined that it lacked integrity due to modifications and structural decay. WYSHPO concurred it was not eligible. A report documenting five historic sites along the corridor of the abandoned old East Entrance road alignment was submitted. Four sites were determined not eligible. One large site, 48YE44 (a 1929–1935 Morrison–Knudsen construction headquarters and camp), contains significant information for addressing research questions identified in the historic archeological treatment plan. Cultural resource inventory of the Brink of the Falls and Inspiration Point roads, both providing views of the Grand Canyon of the Yellowstone, were inventoried and historic sites recorded in 2002 fieldwork; the report was submitted for WYSHPO review and comment in 2003. The report documented two previously-recorded sites and four newly-recorded sites, of which four sites were determined not eligible and two sites need further NR testing.

NHPA Compliance

Montana State Historic Preservation Office visit. In February 2003, Pete Brown, the new architectural preservation specialist for the MTSHPO, visited the park for two days to discuss upcoming projects and take a tour of properties including the Northeast Entrance Station and the Gardiner transportation complex. Business Management staff met with Mr. Brown and the historic architect to discuss projects being planned in the Gardiner area, including rehabilitation of the interiors of the Gardiner duplex, concrete repairs and window repairs to the Gardiner laundry building, an interior elevator in the Gardiner warehouse, and new housing units for park concessioner Xanterra in the community of Gardiner.

Wyoming State Historic Preservation Office visits. WYSHPO staff visited YNP several times in FY03, including an April visit during which the controversial seismic stabilization and rehabilitation plans for the park's administration building were discussed. The

plans would involve the loss of a substantial amount of historic interior fabric dating from the building's original use as a double cavalry barracks by the U.S. Army, and by the early NPS park administration from 1918–1940. James McDonald, historic architect from A&E Architects, was hired to research and identify which areas and features of the building's interior have historic significance.

A large number of individual features were identified, including areas that served as original non-commissioned officers' quarters on each wing. After these significant features were recorded, the WYSHPO determined that the project would result in no adverse effects. Reuse of architectural items in the intact areas is desired; consequently, doors, transoms, and hardware will be re-used wherever possible. The building's exterior will be fully restored, including re-conversion of doorways back to windows, and restoration of the verandas on the front and rear of the building.

Cultural resources staff hosted a four-day meeting with WYSHPO staff in mid-August. The meetings began at Old Faithful Inn, and included personnel from all park divisions. Other participants included James McDonald and associates from A&E Architects, representatives from Xanterra, and Rodd Wheaton, Assistant Regional Director

PROPERTIES	DATE LISTED
National Historic Landmarks	
Old Faithful Inn	7-23-1971
Madison Junction Trailside Museum	7-9-1982
Norris Geyser Basin Trailside Museum	7-21-1983
Obsidian Cliff	6-9-1996
Fishing Bridge Trailside Museum	5-28-1987
Northeast Entrance Station	5-28-1987
National Historic Districts	
Old Faithful	12-7-1982
Roosevelt Lodge	4-4-1983
Lake Fish Hatchery	6-25-1985
Mammoth Hot Springs	3-20-2002
North Entrance Road	5-22-2002
Fort Yellowstone Historic District	7-31-2003
National Historic Sites	
Obsidian Cliff (Nature Shrine) kiosk	7-9-1982
Lamar Buffalo Ranch	12-7-1982
U.S. Post Office–Mammoth Hot Springs	5-19-1987
Lake Hotel	5-16-1991
Queen's Laundry Bath House	7-25-2001

Yellowstone National Park sites listed on the National Register of Historic Places as of September 30, 2003.

for Cultural Resources. The Old Faithful Inn was toured, with a special evening tour to the widow's walk on the ridge of the Old House. The group also inspected the existing Visitor Center, which was determined eligible for listing on the National Register of Historic Places earlier in the year. Representatives of the Maintenance and Interpretive divisions updated the SHPO on the design of the Old Faithful Inn Old House rehabilitation project, and the design development of the proposed new Visitor Education Center, which will take the place of the existing visitor center complex. Tours were also given of the 1913 Men's Dorm, known as the old pub, the Haynes Photo Shop, which was deeded to the National Park Service in the last year, and the Old Faithful complex in general. Chief Landscape Architect Eleanor Clark escorted a nighttime tour to demonstrate the night lighting tests that are being undertaken and implemented at Old Faithful.

On the following day, the group toured the Lake area, including the Lake Hotel and cabins. A Wildland–Urban Interface (WUI) fuel reduction project in the Lake administrative area was inspected, and the group toured the buildings of the Lake Fish Hatchery Historic District. At Canyon, the new Canyon Ranger Station site was inspected, and the new Canyon Visitor Center and associated parking lot re-design introduced. The group also visited the Tower Store, which is slated for demolition, and the Roosevelt Corrals, where a project is currently being planned. A side trip to meet with Pat Cole and

the Yellowstone Association Institute and discuss interior remodeling in the historic bunkhouse was conducted at Lamar Buffalo Ranch. At Mammoth, the group inspected Building 38, the former Fort Yellowstone Cavalry Stable, which is undergoing rehabilitation for the Communications Center, and Building 36, which is slated for seismic rehabilitation.

Assistance to Other Divisions

Canyon Ranger Station. The historic architect continued work with law enforcement and planning staff to select a site for the new Canyon Ranger Station, and assisted in the site design and architectural design of the building, which will be sited near the National Register-eligible Canyon Village complex.

Yellowstone National Park Justice Center. The historic architect's involvement with the design of the new Justice Center complex included meetings with designers CTA Architects, the U.S. District Courts, WYSHPO, U.S. Marshal Service, and YNP's law enforcement staff. The historic architect insured that Section 106 NHPA review of the design program stayed on track, and that the WYSHPO was fully involved as a partner in the decision-making process.

West Entrance Station. The historic architect drafted a memorandum of agreement for the relocation of the station, and managed a contract with James McDonald of A&E Architects, who along with Heritage Research Associates, is writing a history of

the West Entrance Station, including 20 Historic American Building Survey photographs, to document this National Register-eligible property. The papers of William C. Muchow, a leading Rocky Mountain regional Modernist architect from Denver who designed the station, are being investigated. Informal consultation with the National Register historian and the new historic architectural specialist for the MTSHPO resulted in concurrence that the property is eligible for listing on the National Register under the contextual eligibility requirements for Mission 66-era visitor centers, including a distinctive Modernist design and association with a well-known Modernist architect.



The park's West Entrance Station is scheduled for rehabilitation and a move down the road.

Old Faithful Visitor Education Center.

The historic architect continued to assist the Interpretive Division with Section 106 requirements, and involved the WYSHPO in the design of this major addition to the Old Faithful Historic District. In May 2003, Chief of Interpretation Diane Chalfant, Maintenance Division project manager Peter Galindo, and the historic architect met with WYSHPO personnel at their Cheyenne office, along with staff from CTA Architects, to update the SHPO on the building's design development and solicit suggestions. According to SHPO staff, it was the first time a contingent from YNP had visited their office for such a purpose, and the meeting was fruitful for all involved. A Memorandum of Agreement between the park and the WYSHPO was drawn up and signed in fall 2003, dealing with mitigation plans for the eventual demolition of the existing visitor center complex and the review procedures for soliciting SHPO comments through the construction phase for the new Visitor Education Center. The Advisory Council for Historic Preservation was also a signatory to the document.

Historic Research and Publications

As of October 1, 2002, former archivist Lee Whittlesey became the park historian. He continued to function as archivist until June 2003, when all collections duties (library, archives, and museum) became the responsibility of new museum curator Colleen Curry. The historian's new duties include research, writing, education/outreach, and working with park staff and outside researchers to document important events, individuals, and themes relating to Yellowstone history. The historian and curator will work together on the purchase and acquisition of historic books, documents, and objects for the park library, archives, and museum collections.

Books and articles prepared. The year 2003 saw the publication of *Myth and History in the Creation of Yellowstone National Park* (Lincoln: University of Nebraska Press), written by the park historian and Paul Schullery. The park historian also completed a journal article, "The Nez Perce in Yellowstone in 1877: A Comparison of Various Writers' Attempts to Deduce Their Route," to be published by University of Idaho; a history of the Roosevelt Arch (with Paul Schullery), published in *Yellowstone Science*; a brief informal history of the Haynes family; a revision of

his earlier Jones Pass unpublished history; a journal article on the Fountain Hotel, to be published in the Winter 2004 issue of *Montana the Magazine of Western History*; the foreword to the upcoming *Old Faithful Inn: Crown Jewel of National Park Lodges*, by Karen Reinhart and Jeff Henry; and a manuscript history of the Hamilton Photo Shop in connection with the moving of that building in fall 2003.

Reviews. The historian reviewed the following nine manuscripts: Brad Coon's paper on Harry Horr for *Yellowstone Science*; a manuscript by Dr. Greg Clark, "Transcendence at Yellowstone;" the manuscript and galleys for Reinhart and Henry's *Old Faithful Inn: Crown Jewel of National Park Lodges*; Dr. Hal Rothman's history of forest fires and firefighting for the NPS Washington Office; Glenn Plumb and Rosemary Sucec's NPS history of bison in national parks; Dr. Marlene Merrill's *Seeing Yellowstone in 1871: Earliest Description and Images from the Field* for the University of Nebraska Press; Paul Sanders's manuscript on archeology at the brink of the Upper Falls; Carolyn Duckworth's NPS transportation pamphlet for the historic vehicle display at the Roosevelt Arch centennial celebration; and Stephen Biddulph's *Five Old Men of Yellowstone*, about former interpretive rangers of Yellowstone.

Oral histories. In May, the park historian accompanied Gardiner resident Jim Hepburn to examine a heretofore unknown double pioneer gravesite on the grounds of the new Heritage and Research Center, as well as a child's gravesite on the old Stohl ranch. In June, he interviewed Gus Rylander, former YNP employee who renovated the Mammoth cottages in the 1930s. In September, he interviewed Joe Gherardini, a 1941 YNP fisheries employee; Gherardini donated photographs to the park archives. He conducted an audiotaped interview with Rudy Mikolich about his early years in the YNP-Gardiner areas for the park's oral history collection.

Assistance to Other Park Divisions and Partners

The historian advised outside researchers and NPS staff members on numerous occasions. Some examples included meeting with Karen Reinhart about her forthcoming book on the history of the Old Faithful Inn; with Drs. Bill Wyckoff and Lary Dilsaver about their project involving the history

of several national parks; with Candace Savage of Canada National Geographic on the history of Yellowstone wolves; and with Steve Miller, Carrie Guiles, and Angie Hubbs of YCR with regard to hot spring place names for their ongoing GIS thermal mapping project. He also met with NPS museum staff on numerous occasions with regard to ongoing identification and cataloging of historic photographs and museum objects; met or talked by phone with Steve Mishkin about his exhaustive history of YNP laws and legislation relating to thermal springs; and met with researcher Janet Chapple about her project involving early Yellowstone visitors' manuscripts of Yellowstone travel.

Outreach

The historian took numerous trips and made numerous speeches for outreach purposes. In October, he attended the annual Western History Association meeting in Colorado Springs, Colorado, where he served as a "commenter" in a symposium session involving Dr. Richard Bartlett and the "Role of Scientists in the American West." He spoke to groups visiting the park and to some in other locations. Talks included "Bison Distribution and Abundance in Early Yellowstone," "Top Ten Events in Yellowstone History," "Yellowstone History and Rangers," "Using the Yellowstone Archives for Genealogical Research," "Yellowstone's Great Conservation Events," and "Death in Yellowstone."

Whittlesey made presentations for seasonal orientations of park and concession employees, attended a number of partnership meetings, taught several Yellowstone Association Institute classes, and gave a number of park orientation or specially arranged walking and bus tours during the year. He was also interviewed by a number of media organizations approved by the park's Public Affairs Office.

MUSEUM, LIBRARY, AND ARCHIVES

Staffing

Following the resignation of curator Susan Kraft at the beginning of 2003, Colleen Curry was hired as the park's new curator. Colleen, who arrived in June, came to Yellowstone from the George

Washington Memorial Parkway, where she was curator of the Parkway, Arlington House, and the Robert E. Lee Memorial. Permanent museum aide Beth Raz resigned in March to continue her studies at Montana State University in Bozeman, and cultural resources specialist Tasha Felton was hired in her place, with her position divided between the museum and ethnography programs. Special project monies primarily supported other museum staff positions, including term museum technician Sean Cahill, who continued his diligent work in preserving the historic vehicle collection through preventive conservation, as well as serving as the park's museum registrar. Term museum technician Steve Tustanowski-Marsh continued to catalog objects and served as the primary contact for the photo archives. Contractor Susan Glenn worked on several cataloging projects involving the Susan and Jack Davis collection. Two seasonal museum technicians, Bridgitte Case and David Amott, joined the staff during the summer months to continue cataloging the Davis collection.

Harold Housley was promoted to term archives specialist. Research library staff this year included librarians Alissa Cherry, Barbara Zafft, and Tara Cross. Alissa left in August to attend graduate school in Vancouver, British Columbia, and Barbara retired in July. Tara assumed all librarian responsibilities and successfully maintained library operations despite the staffing shortage. Beginning in August, the library went to reduced hours to better accommodate the shortage and to prepare for the move to the Heritage and Research Center (HRC) next year. Library intern Jessica Gerdes spent the summer establishing electronic patron records in preparation for automated circulation, cataloging, and working on the barcoding project for the general stacks.

Preservation, Conservation, and Access

Staff worked on a variety of projects to improve collection preservation and accessibility. Yellowstone Association, Yellowstone Park Foundation, and the NPS Special Emphasis Program Allocation System (SEPAS) funds supported these projects and the staff needed to accomplish them.

Access. Staff undertook several important projects to make more of the collections accessible via the park's website. Working closely with park webmaster Tom Cawley and YCR secretary

Beth Taylor, Harold Housley updated indexes to the archives on the park website, while Steve Tustanowski-Marsh began work to make images from the park's photo archives available on the internet. Using funds from the Yellowstone Park Foundation, Tasha Felton completed a project to make Thomas Moran's 1871 Hayden expedition journal available on the internet, as well. The transcribed journal, as well as images of the original, may be viewed at www.nps.gov/yell/technical/museum/morandiary/index.htm.

Book maintenance. Alissa Cherry and Barbara Zafft presented a book repair workshop in Thermopolis, Wyoming, teaching area librarians such conservation techniques as paper mends, hinge tightening, and spine mending. Alissa also taught the workshop to the park's archives, library, and museum staff. Using Yellowstone Association and SEPAS funds, 75 custom-made clamshell boxes were made for some of the library's rare books, over 60 theses were professionally bound, and 200 additional custom clamshell boxes were ordered for the rare book collection.

Cataloging. The archives staff cataloged the existing backlog of items in the oral history and videotape collections using backlog cataloging funds. They also began processing records received from the Superintendent's Office and the park's Central Files. Important and interesting acquisitions to the collection continued at a lively pace and, as of September 30, a total of 5,270,024 objects were accessioned into ANCS+, the NPS collections management database—an increase of 375 items from last year. Museum staff cataloged 2,152 objects (most from the Susan and Jack Davis collection) this year, bringing the total number of objects cataloged in the ANCS+ system to 381,593. This number



Thomas Moran and His Diary

Yellowstone National Park's museum and archives collections include the diary of artist Thomas Moran. Moran's diary has been transcribed on the following pages.



Thomas Moran, *Grand Canyon of the Yellowstone*, 1872
oil on canvas, 31.8 x 36.8 cm (12 1/2 x 14 1/2 in)
Department of the Interior

In 1871 the Hayden expedition set out to survey the sources of the Missouri and Yellowstone Rivers, the area that was soon to become the nation's first national park. Thomas Moran joined as artist of the team and depicted many of Yellowstone's geologic features and landscapes. These depictions later proved essential in convincing the United States Congress to establish Yellowstone as a national park.

Thomas Moran was born in Langshire, England in 1837. In 1844 his family moved to Baltimore and later settled in Philadelphia. Around the age of 16, Moran began his artistic training as an apprentice in a wood engraver's shop. After two years Moran left his apprenticeship to begin a full-time painting career.

Through the efforts of cultural resources staff, Thomas Moran's Yellowstone journal is now available online.

includes objects in the following categories: 92,982 archeology; 249 ethnology; 66,819 history; 206,077 archives; 14,552 biology; 106 paleontology; and 815 geology. Despite these strides, however, there was still a cataloging backlog of 4,888,431 objects that staff continued to address. The park received over \$80,000 in SEPAS funds to allow the staff to continue tackling the large cataloging backlog.

Conservation. In June, museum staff cleaned and performed preventive conservation on the Shaw and Powell stagecoach on exhibit in the Old Faithful Lodge. They also cleaned and prepared the Norris Ranger Museum and Fishing Bridge Museum for the summer season. Sean Cahill continued to perform preventive conservation on several historic vehicles. Steve Tustanowski-Marsh worked with carpenter Dennis Clark to make improved stor-

age racks for the collection's historic saddles. The racks are much wider to provide better support, and can be transported to the new HRC. Bridgitte Case and David Amott created specialized padding on the mounts using acid-free materials. These efforts greatly enhanced the storage and preservation of the saddles.

With the increasing use of electronic media and digital images, staff attended several pertinent classes for training on the best way to preserve them. Harold Housley traveled to Great Falls, Montana, to attend a one-day workshop, "Electronic Records Issues," presented by the National Archives and Records Administration (NARA). The workshop presented methods and techniques for evaluating, managing, and preserving electronic records. Harold also attended the "Archives in the National Park Service" conference in Denver in which the current state of archives in the NPS was discussed, as well as issues including the unknown extent of materials in parks, management support, staff skill levels, and funding. Steve Tustanowski-Marsh participated in a "Preserving Photographs in a Digital World" seminar in Rochester, New York, sponsored by the George Eastman House, International Museum of Photography and Film, and the Image Permanence Institute at the Rochester Institute of Technology. The seminar brought together the world's foremost experts in digital imagery and focused on the technical aspects of preservation of historic photographs through conversion to a digital format. Steve will be able to apply the knowledge he gained at this seminar to the planned digitizing of the park's entire photograph collection (90,000+ images) beginning in late 2004.

Disaster plan. Contractor Jim Davis completed a draft of the "Museum Collection Emergency Operation Plan" and submitted it to the park for review. The plan discusses preparation, response and recovery operations in the event of a disaster. However, it does not address the new Yellowstone Heritage and Research Center. Staff will review the plan in the coming year and work with the contractor to incorporate the new facility into the plan.

Grants. A Save America's Treasures grant was awarded to the park and the Denver Service Center's Technical Information Center (TIC) to identify, preserve, catalog, and digitize architectural drawings of Yellowstone's historic buildings. The park and

the TIC will work with the University of Colorado through the Cooperative Ecosystem Studies Unit program to accomplish this project, slated to begin in 2004.

Loans. Museum staff arranged for the loan of nine objects to the Yellowstone Art Museum in Billings from July through October. The objects included five watercolors by Thomas Moran, his sketchbook, palette knife, and two paintbrushes. Included in the exhibit, *Lewis and Clark's West: Early Views of the Missouri and Yellowstone River Country*, the objects were viewed by 5,712 visitors. Staff also made preliminary loan arrangements with the Autry Museum of Western Heritage in Los Angeles for that museum to borrow nine watercolors and drawings from June 2004–October 2005. The objects will be part of a traveling exhibit entitled *Drawn to Yellowstone: Artists in America's First National Park*. The loaned art includes two Henry Wood Elliott drawings, two Thomas Moran watercolors, and two John Henry Renshawe watercolors, among other pieces.

Notable Acquisitions

Archives. The archives received many interesting items this year, including a group of records from the Superintendent's Office covering a variety of administrative matters from 1977–2002. These records provide important information on dealings between the park and various organizations, including the Greater Yellowstone Coalition, the Yellowstone Association, area chambers of commerce, the World Heritage Commission, and the National Parks Conservation Association. The records also document bison management, park planning, and concessioner operations.

A group of records from the park's Central Files was transferred to the archives. These records document park management from 1987–1995, and provide key information on goals and objectives, operations evaluations, and correspondence with members of Congress. The archives also received records from the Resource Council including agendas, meeting minutes, and project lists from 1993–2000.

A series of eight letters and memos dated 1927 to John Hitchings, naturalist at Tower Fall Ranger Station, from Gerald Marsh, head ranger naturalist, was received. Topics include: number of bears in the park; description of beaver; warning against discuss-

ing future park plans or policy in lectures; general instructions to ranger naturalists; schedule of guide trips and lecture schedule; and fraternal organization of temporary park rangers. These letters were purchased using Yellowstone Park Foundation funds.

Library. Through the generosity of several donors, and with funds from the Yellowstone Association, over 220 new books, rare books, maps and bound periodicals were added to the Yellowstone Research Library's holdings during FY03. Notable acquisitions include:

1. *My Vacation in Yellowstone and Rocky Mountain National Parks*, by Mrs. G.J. Herrick (1927), handwritten diary;
2. *The Land of Shining Mountains: Scenic Grandeur Supplement of the Billings Gazette* (1936);
3. *Pictorial Poems of the Scenic West*, by Franklin Robert Hamilton (1928–29);
4. *A Geographical Reader*, by James A. Johonnot (1882);
5. *The National Park Story in Pictures*, by Isabelle F. Story (1957);
6. *A Hysterical Map of the Yellowstone Park...*, by Jolly Lindgren (1938);
7. *A Family Trek to the Yellowstone and 24 Years After*, by Eleanor M. Corthell (1928);
8. *The Seven Wonders of the New World*, by Rev. J.K. Peck (1885);
9. *Grace Harlowe's Overland Riders in the Yellowstone National Park*, by Jessie Graham Flower (1923);
10. *Yellowstone Nature Notes*, Vol. 1, No. 1 (1924);
11. *Great Fishing, Hunting, and Camping Trip to Yellowstone Park and the Big Game Country, Wyoming and North-Western Line* (1907);
12. *Breaking New Ground*, by Gifford Pinchot (1947).

Museum. Museum staff curtailed its collecting this year while busy preparing for a 100% inventory of the collections and move preparations to the HRC. The following are some of the more noteworthy items collected.

Pete Perozic collection.— This important collection of historic images was owned by Peter Perozic, who worked for the Yellowstone Park Transportation/Yellowstone Park Company from 1919–1959. The images chronicle the various types of trucks used in the park, including vehicles similar

to, if not identical to, those in the historic vehicle collection.

Chuck Young loan.— Chuck Young allowed museum staff to scan his historic images of the controversial bow and arrow hunt of grizzly bears in the park in 1920. Young's grandfather, Arthur Young, along with Saxton Pope, participated in the hunt, which was authorized by Horace Albright (much to his later chagrin).



PRIVATE COLLECTION OF CHUCK YOUNG

Art Young and Saxton Pope pose with a grizzly bear they killed after receiving a permit from Horace Albright to collect grizzlies in the park by bowhunting in 1920.

“Horace,” hide of Old Tex.— The 2002 Annual Report discussed the pending transfer from Grand Portage National Monument to Yellowstone National Park of “Horace,” the hide of Old Tex, the record-size bison raised at the Lamar Valley Buffalo Ranch. The hide returned to the park in April 2003, and upon examination, staff found it to be in surprisingly good condition, considering that Horace Albright used it as a rug in his office and it later served as an educational tool in the interpretive programs of several parks. Staff plan to eventually exhibit the hide and skull (which is also in the park's collections) in the new HRC.

Other Acquisitions

1. Button from the Northern Pacific Railroad “N.P. Junction Jubilee/Carlton, Minnesota, Yellowstone Park Line;”
2. 27 photographs from a 1927 family trip to Yellowstone (includes images of the bison pen at Mammoth, Fort Yellowstone, camping, and the National Hotel, among others);
3. Original drawing by Greg Siple of an editorial

- cartoon on the issue of private commercial concessions in Yellowstone National Park, published in *High Country News* in 1981;
4. Two photograph albums documenting trips to Yellowstone National Park, one with journal from 1919, the other from 1898;
 5. Two bolo ties with the Yellowstone Park Company logo;
 6. Greyhound bus poster from the 1960s featuring black bears and "Yellowstone;"
 7. Suitcase covered with traveling stickers from "Yellowstone Park Lodges and Camps," "Hamilton Stores," and "Yellowstone Park Hotels;"
 8. Souvenir creamer and plate. Creamer has images of geysers and bears, while the Staffordshire blue and white transferware plate has Old Faithful, Lower Falls, and Morning Glory Pool on it.

Research, Technical Assistance, and Outreach

Museum, archives, and library staff assisted many researchers, both park staff and outside investigators, with a variety of research topics, publications, and projects. A total of 1,422 researchers (533 park staff and 889 outside researchers) were assisted (178 in the museum collections and photograph archives; and 1,244 in the library). Noteworthy projects included preliminary research for Ken Burns's upcoming PBS documentary, *The History of the National Park Service* (expected to air in 2009). Yellowstone will be a predominant subject of the series, and the park's collection will play a vital role in its development. Assistance was provided to Delaware North/Yellowstone General Stores as part of a five-year project to utilize historic images in large formats in store interiors. The Mammoth and Old Faithful store exhibits will be completed in 2003–2004. Staff also assisted numerous park offices, including landscape architecture, public affairs, vegetation, engineering, fisheries, and interpretation, in many park-related projects.

Exhibits. Museum staff planned,

installed and provided interpretation for an historic vehicle exhibit as part of the Roosevelt Arch centennial event in August. The vehicles on display included a 1917 open touring bus, 1917 touring car, and 1931 Model 614 bus (all made by the White Motor Company), as well as a 1960 Willys Motor Company fire truck. Staff assisted the Division of Interpretation's Media and Planning Office with the preparation of a booklet for the exhibit by providing information and historic photographs, and reviewing text. Sean Cahill created a new exhibit for the Shaw and Powell stagecoach in the Old Faithful Lodge.

Assistance to other parks, centers, and partners. Sean Cahill and Steve Tustanowski-Marsh traveled to Tucson, Arizona, in January to assist the staff of the Western Archeological and Conservation Center (WACC) with packing and moving collections; Alissa Cherry, Tara Cross, and Harold Housley assisted in February. All received valuable hands-on training and experience with packing a wide variety of objects, preparing storage cabinet drawers for transport, packing large textiles, and strapping/shrink-wrapping packed boxes onto pallets for transport. They will be able to apply this experience and training to Yellowstone's collection move in 2004. While in Tucson, staff also met with their counterparts at WACC to receive specialized



Museum technician Steve Tustanowski-Marsh helps with the move of the Western Archeological and Conservation Center, gaining experience for the upcoming move to the Yellowstone Heritage and Research Center.

training in moving their respective collection areas here in Yellowstone. WACC saved the park quite a bit of money by “donating” a large amount of surplus moving supplies and steel shelving for use during the upcoming move and in the new HRC. Steve Tustanowski-Marsh picked these materials up at WACC after their move and delivered them to Yellowstone.

Alissa Cherry and Tara Cross continued to work with the Wyoming Libraries Database Network (WYLD), of which the Yellowstone Research Library is a member, to receive training in cataloging and circulation and learn about upgrades being planned for the cataloging system. Tara attended training for a new, web-based interlibrary loan system that will be implemented in the park’s research library after the move to the Yellowstone Heritage and Research Center.

As part of the agreement between NARA and YNP to manage and preserve the park’s archives, Joel Barker (assistant regional administrator for NARA’s Rocky Mountain Region) came in September for an annual inspection. Colleen Curry and Harold Housley met with him and toured him around the various archives storage areas. They also discussed the new Yellowstone Heritage and Research Center and toured the facility with project manager John Stewart.

Harold Housley attended the annual meeting of the Society of the American Archivists in Los Angeles, California. He participated in sessions on the preservation of films and videotapes, volunteers in archives, and reference.

Curator Colleen Curry participated in Intermountain Region (IMR) planning meetings with other IMR curators in Denver to discuss and revise the proposed “Intermountain Region Museum Collection Facilities Strategy.” The strategy arose as the result of more and more parks in the region requesting funding for new collections storage facilities. After several revisions, park comments and meetings, the current draft strategy recommends using the new Yellowstone Heritage and Research Center (HRC) as one of 18 regional storage facilities. The strategy task force is aware that the HRC was planned before such a strategy was even considered, and that much will need to be done before it can begin accepting the collections of other parks. For example, compact mobile storage units will need to

be installed in museum storage, and the vehicle wing will need to be added to allow for adequate storage space. The strategy is still in draft form, and the task force will continue to work with the parks being proposed as regional facilities.

Tours. The park curator and historian gave a tour of the archives and art collection to the board of the Yellowstone National Art Trust. Sean Cahill provided a tour of the historic vehicle collection to participants in a Yellowstone Association Institute class taught by Leslie Quinn. Steve Tustanowski-Marsh made part of the photograph archives available for a Yellowstone Association Institute class on historic photographs in the park, taught by Lee Whittlesey.

Yellowstone Heritage and Research Center

Construction of the new Yellowstone Heritage and Research Center (HRC) near Gardiner, Montana, began this year and continues on schedule. The new facility will greatly improve the storage of all of the park’s collections (with the exception of the historic vehicle collection, for which a wing to the HRC is planned in the future) and will enhance staff and researcher work areas. The upper floor will contain storage for the archives, rare books, maps, and oversized documents, as well as a large reading room and library area. The archivist, librarian, and historian offices will also be on this floor. The main floor will contain all museum storage, museum staff offices, a curatorial workroom, and large research room to allow researchers to examine items from the photograph archives as well as other collections. The herbarium will also be located on the main level, along with the botanist’s office and a large herbarium workspace. The lower level will contain the non-storage functions of the building, such as labs for archeology, geology, paleontology, and natural history, a herbarium preparation room, and “quarantine” room for objects so they may be examined for insects and mold prior to being introduced upstairs to museum storage. The foyers of both the main and upper floors will have space where the park’s varied collection will be exhibited in rotating displays. The HRC is scheduled to be completed in April 2004, and staff will begin to monitor the environment and allow for an off-gassing period during May. Staff are scheduled to begin the move of the collections to the new facility in June 2004.



Coming right along—the new Yellowstone Heritage and Research Center is scheduled for completion in summer 2004.

Archives, Library, and Museum staff aggressively began planning for the move of the five million objects, and the park curator brought in Alice Newton, Harpers Ferry Center registrar, in August to help with the move and storage plans. Newton developed a tentative move plan as well as storage floor plans. The curator expanded the move plan and began working with staff to undertake preliminary preparations for all collection areas. Tara Cross compiled a “Move Plan” binder for the library and

attended several training sessions on moving libraries. Staff began a 100% inventory of all collection areas in order to account for every object, archival item, and library book prior to the move, and to ensure that locations in the ANCS+ collections management database are current. By completing these tasks prior to the actual move, staff will be able to account for each object, its location, and through examination determine any special handling and packing that may be required for the move.